# PUBLIC HEALTH FACT SHEET

# Salmonella

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

#### What is salmonella?

Salmonella are germs (bacteria) that cause an infectious disease (called "salmonellosis") of the bowel in humans and animals. Although the disease is usually limited to the bowel and most infected people do not have any serious medical complications, the salmonella germ can spread to other systems of the body, such as the blood and bone. This may cause serious complications in infants and in people who are very old or are immunocompromised.

#### What are the symptoms?

The most common symptoms are stomach cramps, diarrhea, fever, nausea, and sometimes vomiting. Symptoms can take up to three days to show up, but most often begin 12 to 36 hours after the germs are swallowed. Symptoms generally last for several days. Some people with salmonellosis become sick enough to require hospitalization.

#### How is salmonella spread?

The germs must be swallowed to cause disease. Usually this happens when someone eats food that has been contaminated with the germs and has not been properly handled, prepared or cooked. The germs can also spread when people do not wash their hands thoroughly with soap and water after using the toilet, changing diapers, or handling reptiles. People who get the germs on their hands can infect themselves by eating, smoking, or touching their mouths. They can also spread the germs to anyone or anything they touch, especially food, which can then make others sick if not cooked enough to kill the germs. Salmonella is commonly spread from person to person in day-care centers and other environments where hygiene may be poor.

### What types of food are most likely to spread salmonella?

Salmonella germs are common in uncooked food products from animals, such as eggs, egg products, meat, meat products, poultry, unpasteurized milk and other unpasteurized dairy products. However, thorough cooking and processing will kill the germ. Salmonella can be in any type of food if salmonella germs get on the food. For example, a food handler with salmonella may get germs on the food if his or her hands are not washed thoroughly before preparing food.

### Can salmonella be spread by animals?

Yes! Salmonella germs have been found in the stool (feces) of both sick and apparently healthy animals (and even apparently healthy people). Most common pets and farm animals, including poultry (chickens, geese, etc.), cows, pigs, dogs, cats and reptiles (such as turtles and iguanas) have been found to carry the germ. Salmonella has also been found in some wild animals. Therefore, it is very important to wash your hands well, with plenty of soap and water, after handling these animals.

### How can you know for sure if you have salmonellosis?

Your doctor, nurse or health center must send your stool sample to a laboratory. The laboratory then grows germs and tests them to see if any of the germs are salmonella. It takes the lab several days to do this test.

#### How is the disease treated?

Usually, people who are otherwise healthy will get over the illness without having to be treated. Antibiotics are used to treat salmonellosis only in people whose bodies may not be able to fight off the germ on their own, such as the very young, very old or immunocompromised. If otherwise healthy people take antibiotics to fight salmonella, the germs might actually stay in the body longer than if they had not taken antibiotics. If you think you might have this disease, you should see your doctor or go to your health center. People with diarrhea or vomiting need extra fluids.

#### How can you prevent salmonellosis?

The most important things to remember are that the germs can only make you sick if you swallow them, and that the germs are killed by thoroughly washing your hands with soap and water and by thorough cooking. Be extra careful when using food products from animals, such as eggs, poultry, meats, and dairy products.

Follow the tips below; if you make them your habits, you can prevent salmonellosis—as well as other diseases:

- Always wash your hands thoroughly with soap and water before eating or preparing food, after using the toilet, after changing diapers, and after touching your pets or other animals (especially reptiles).
- Make sure to thoroughly cook all food products from animals, especially poultry and eggs. Do not eat raw or cracked eggs, unpasteurized milk, or other unpasteurized dairy products.
- Keep food that will be eaten raw, such as vegetables, from becoming contaminated by animal-derived food products. For example, scrub your hands, all utensils and surfaces that have been in contact with raw poultry before you make a salad.
- Avoid letting infants or young children come into contact with reptiles, such as turtles or iguanas. If they do, make sure to wash their hands thoroughly with soap and water.
- If you are taking care of someone with diarrhea, scrub your hands with plenty of soap and water after cleaning the bathroom, helping the person use the toilet, or changing diapers, soiled clothes or soiled sheets.
- If you or your child has persistent diarrhea (with or without a fever), or the diarrhea is very bad, call your doctor or health center for advice.

### Are there any restrictions for people with salmonellosis?

Yes. Because salmonellosis is a disease that can easily spread to other people, health care providers are required by law to report cases of salmonellosis to the local board of health. In order to protect the public, workers at food-related businesses who have salmonellosis must stay out of work until they don't have diarrhea and one lab test on a stool sample shows that there are no salmonella germs. Workers in food-related businesses who have diarrhea and live with someone who has salmonellosis must also show that they have no salmonella in their stool. Food-related businesses include restaurants, sandwich shops, hospital kitchens, supermarkets, dairy or food-processing plants. This law also includes workers in schools, residential programs, day-care and health care facilities who feed, give mouth care or dispense medications to clients.

## Where can I get more information?

- Your doctor, nurse or health center
- Your local board of health (listed in the phone book under local government)
- Massachusetts Department of Public Health Division of Epidemiology and Immunization at (617) 983-6800 or toll-free at 1-888-658-2850 or on the MDPH website at http://www.mass.gov/dph